

**WHAT IS CLAIMED IS:**

1. A generator set having a converter composed of semiconductor rectifying devices for rectifying the power output of a magnetic generator and an inverter for converting a direct current output of the converter into an alternating current form of a particular frequency, comprising:

a semiconductor rectifying device driving means for controlling the conduction of the semiconductor rectifying devices to maintain the voltage output of the converter at a target voltage level;

a revolution detecting means for detecting the revolution of the magnetic generator; and

a target voltage setting means for determining the target voltage level so that the target voltage level show a positive characteristic to the revolution detected.

2. A generator set having an inverter according to claim 1, further comprising:

a conduction rate detecting means for detecting the conduction rate of the semiconductor rectifying devices; and

an engine revolution controlling means for controlling the revolution of an engine to drive the generator so that the conduction rate is converged on a predetermined target

rate, wherein

the controlling of the revolution of the engine is implemented by adjusting the supply of fuel to the engine.

5

10 3. A generator set having an inverter according to claim 2, wherein the engine revolution controlling means is arranged to decrease the revolution of the engine when the deviation of the conduction rate from the target rate is positive and increase the same when negative.

15 4. A generator set having an inverter according to claim 3, wherein a rate of change of the revolution of the engine is greater at an increase than at a decrease thereof.